

Materials Laboratory Library  
Selected New Acquisitions August-September 2006

**HARDCOPY BOOKS, REPORTS, MEDIA**

**Interdisciplinary Interest**

**AASHTO Provisional Standards 2006.** American Association of State Highway and Transportation Officials, 2006. PS-09.  
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**Annual Statewide Project Engineers' Conference, 20<sup>th</sup>, 2006.** Washington State Dept. of Transportation, 2006.  
CDROM 625.7 STATEWI 2006 no20  
Available on the Intranet: <http://wwwi.wsdot.wa.gov/eesc/cons/PEMeeting.cfm>

**Bridge Design Manual LRFD.** Washington State Dept. of Transportation, 2006. M 23-50.  
WSDOT M 23-50 2006  
<http://www.wsdot.wa.gov/fasc/EngineeringPublications/BDM.htm>

**Construction 2006.** Transportation Research Board, 2006. Transportation Research Record no. 1946.  
625 HRR 2006 no1946

**Development of Statistical Analysis Guidelines for Highway Materials and Research Activities.** South Carolina Dept. of Transportation, 2006.  
620.11 BURATI 2006

**Effective Visualization Techniques for the Public Presentation of Transportation Projects.** New England Transportation Consortium, 2005.  
625.725 EFFECTI 2005

**Interstate 50: 50 Years of the Dwight D. Eisenhower National System of Interstate and Defense Highways.** Faircount LLC and American Association of State Highway and Transportation Officials, 2006.  
388.122 INTERST 2006

**Machinery's Handbook,** 27<sup>th</sup> ed. Industrial Press, 2004.  
R 621.802 MACHINE ed.27 2004

**Measuring Performance Among State DOTs.** American Association of State Highway and Transportation Officials, 2006.  
AASHTO MPAS-1 2006

**Standard Specifications for Transportation Materials and Methods for Sampling and Testing,** 26<sup>th</sup> ed. American Association of State Highway and Transportation Officials, 2006.  
HM-26.  
AASHTO HM-26 2006 pt 1A, 1B, 2A, 2B

## Computer Support & Applications

**Learning C# 2005: Get Started with C# 2005 and .NET Programming.** O'Reilly, 2006.  
005.133 LIBERTY 2006

**Statistical Analysis with Excel™ for Dummies.** Wiley, 2005.  
519.5028 SCHMULL 2005

## Geotechnical Engineering, Engineering Geology

**Advances in Earth Structures: Research to Practice: Proceedings of Sessions of GeoShanghai, June 6-8, 2006, Shanghai, China.** American Society of Civil Engineers, 2006.  
Geotechnical Special Publication no. 151.  
624.1891 ADVANCE 2006

**Barron Mountain Rock Reinforcement, Phase II, I-93, Woodstock, New Hampshire: Validation of NDT Results for Condition Assessment of Rock Reinforcements.** New Hampshire Dept. of Transportation, 2005.  
625.171 FISHMAN 2005

**Design Considerations for a Prototype Erosion Control Testing Plot.** New England Transportation Consortium, 2006.  
631.45 LONG 2006

**Earth Pressure Behind a Retaining Wall.** Minnesota Dept. of Transportation, 2005.  
624.164 BENTLER 2005

**Foundation Analysis and Design: Innovative Methods: Proceedings of Sessions of GeoShanghai, June 6-8, 2006, Shanghai, China.** American Society of Civil Engineers, 2006.  
Geotechnical Special Publication no. 153.  
624.15 FOUNDAT 2006

**Ground Modification and Seismic Mitigation: Proceedings of Sessions of GeoShanghai, June 6-8, 2006, Shanghai, China.** American Society of Civil Engineers, 2006. Geotechnical Special Publication no. 152.  
624.1513 GROUND 2006

**Integrated Streambank Protection Guidelines 2003.** Washington Dept. of Fish and Wildlife, Washington State Dept. of Transportation, and Washington State Dept. of Ecology, 2002.

**Integrated Use of Terrestrial Laser Scanning and Advanced Numerical Methods for a Total Slope Analysis of Afternoon Creek, Washington.** University of British Columbia M.S. thesis, 2006.  
551.307 STROUTH 2006

**Laboratory and Field Study of Composite Piles for Bridge Substructures.** Federal Highway Administration, 2006. FHWA-HRT-04-043.  
624.154 LABORAT 2006

**Lime Application Methods.** Kansas Dept. of Transportation, 2006.  
624.151363 OCONNOR 2006

**Rock-Socketed Shafts for Highway Structure Foundations.** Transportation Research Board, 2006. NCHRP Synthesis no. 360.  
625.7 N2131s 2006 no360  
[http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp\\_syn\\_360.pdf](http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_syn_360.pdf)

**Stream Habitat Restoration Guidelines 2004.** Washington State Dept. of Ecology, U.S. Fish & Wildlife Service, and Washington Dept. of Fish and Wildlife, 2004.  
333.9162 STREAM 2004

## **Pavements**

**Asphalt Mix Design and Construction: Past, Present, and Future.** American Society of Civil Engineers, 2006.  
625.85 ASPHALT 2006

**Determination of Optimum Gradation for Resistance to Permeability, Rutting and Fatigue Cracking.** North Carolina Dept. of Transportation, 2005.  
625.85 KHOSLA 2005

**Durability of Portland Cement Concrete–Aggregates, Cements, and Pozzolans.** Nebraska Dept. of Roads, 2005.  
625.84 TUAN 2005

**Evaluation of High-Slump Concrete for Bridge Overlays.** Iowa Dept. of Transportation, 2005.  
624.283 KEIERLE 2005

**Evaluation of Hot-Mix Asphalt Moisture Sensitivity Using the Nottingham Asphalt Test Equipment.** Iowa Dept. of Transportation, 2005.  
625.85 KIM 2005b

**Evaluation of Narrow Transverse Contraction Joints in Jointed Plain Concrete Pavements.** Louisiana Transportation Research Center, 2006.  
625.84 RASOULI 2006

**Evaluation of the Use of Lithium Compounds in Controlling Alkali-Silica Reactivity in Concrete Pavement.** Nebraska Dept. of Roads, 2005.  
625.84 TUAN 2005b

**Focus on Pervious Concrete: Conference Proceedings. Concrete Technology Forum, Nashville, Tenn., May 24-25, 2006.** National Ready Mixed Concrete Association, 2006.  
CDROM 625.84222 CONCRET 2006 no1

**Highway Concrete Pavement Technology Development and Testing, Volume I: Field Evaluation of Strategic Highway Research Program (SHRP) C-202 Test Sites (Alkali-Silica Reaction (ASR)).** Federal Highway Administration, 2006. FHWA-RD-02-082.  
625.84 HIGHWAY 2006 v1

**Highway Concrete Pavement Technology Development and Testing, Volume II: Field Evaluation of Strategic Highway Research Program (SHRP) C-203 Test Sites (Freeze-Thaw Resistance).** Federal Highway Administration, 2006. FHWA-RD-02-083.  
625.84 HIGHWAY 2006 v2

**Highway Concrete Pavement Technology Development and Testing, Volume III: Field Evaluation of the Strategic Highway Research Program (SHRP) C-205 Test Sites (High-Performance Concrete).** Federal Highway Administration, 2006. FHWA-RD-02-084.  
625.84 HIGHWAY 2006 v3

**Highway Concrete Pavement Technology Development and Testing, Volume IV: Field Evaluation of Strategic Highway Research Program (SHRP) C-206 Test Sites (Early Opening of Full-Depth Pavement Repairs).** Federal Highway Administration, 2006. FHWA-RD-02-085.  
625.84 HIGHWAY 2006 v4

**Highway Concrete Pavement Technology Development and Testing, Volume V: Field Evaluation of Strategic Highway Research Program (SHRP) C-206 Test Sites (Bridge Deck Overlays).** Federal Highway Administration, 2006. FHWA-RD-02-086.  
625.84 HIGHWAY 2006 v5

**Impact of Price Reductions on the Long-Term Pavement Performance of HMA Mixes in North Carolina.** North Carolina Dept. of Transportation, 2005.  
625.85 IMPACT 2005

**Materials-Related Forensic Analysis and Special Testing, Pennsylvania Department of Transportation: “Develop and Evaluate a Plan for a Consistency Evaluation of Hot-Mix Asphalt Plant Production.”** Pennsylvania Dept. of Transportation, 2005.  
625.85 BOYLE 2005b

**Materials-Related Forensic Analysis and Special Testing, Pennsylvania Department of Transportation: “Synthetic Fiber Reinforced Cement Concrete for Highway Construction Applications.”** Pennsylvania Dept. of Transportation, 2005.  
624.1834 BOYLE 2005

**Performance Tests for Hot Mix Asphalt (HMA) Including Fundamental and Empirical Procedures.** ASTM International, 2006. Special Technical Publication 1469.  
625.85 PERFORM 2006

**Portable Falling Weight Deflectometer Study.** New England Transportation Consortium, 2005.  
625.76 STEINER 2005

**Restricted-Zone Requirements for Superpave Mixes Made with Local Aggregate Sources.** Nebraska Dept. of Roads, 2006.  
625.85 KIM 2006

**Review of the Long-Term Pavement Performance Backcalculation Results—Final Report.** Federal Highway Administration, 2006. FHWA-HRT-05-150.  
625.85 REVIEW 2006

**Rubblization: Design and Construction Guidelines on Rubblizing and Overlaying PCC Pavements with Hot-Mix Asphalt.** National Asphalt Pavement Association, 2006. Information Series 132.  
625.76 DECKER 2006

**US-69 Surface Texture and Noise Study—(4.7 mi N SCoL, N to 0.6 mi S K-68, Miami County).** Kansas Dept. of Transportation, 2006.  
363.741 BRENNAN 2006

**Using Rolling Deflectometer and Ground Penetrating Radar Technologies for Full Coverage Testing of Jointed Concrete Pavements.** Texas Dept. of Transportation, 2006.  
625.76 SCULLIO 2006

## **Materials, Testing, Inspection**

**American Wood-Preservers' Association Standards 2006.** American Wood-Preservers' Association, 2006.  
R 674.028 AMERICA 2006

**Cement Kiln Dust: Selected References on Use and Applications.** Portland Cement Association, 2006.  
666.94 CEMENT 2006

**Flashing Arrow Panels and Portable Changeable Message Signs: Winter 2006 Evaluation Final Report.** American Association of State Highway and Transportation Officials, 2006.  
NTPEP Report no. 7004.1  
AASHTO NTPEP 7004.1

**Identifying Incompatible Combinations of Concrete Materials.** Federal Highway Administration, 2006. FHWA-HRT-06-079, FHWA-HRT-06-080.  
620.136 IDENTIF 2006 v1, v2

**Laboratory and Field Evaluations of Permanent Non-Plowable Raised Pavement Markers Georgia Test Deck – Two Year Evaluation (2003 Product Submissions.** American Association of State Highway and Transportation Officials, 2006. NTPEP Report no. 4007.2.  
AASHTO NTPEP 4007.2

**Mitigation of Alkali-Silica Reactivity in New Concrete in New Hampshire, Phase 2: Minimum Amounts of Admixture(s) Needed to Significantly Minimize ASR.** New Hampshire Dept. of Transportation, 2005.  
620.1362 LANE 2005

## **Interactive Training DC-ROMs**

**Fundamentals of Asphalt Compaction: Interactive Operator Training CD.** Caterpillar, 2002.  
CDROM 625.8222 FUNDAME 2002

**Fundamentals of Paving: Interactive Training CD.** Caterpillar, 1999.  
CDROM 625.8222 FUNDAME 1999

**Understanding Mat Defects: Interactive Training CD.** Caterpillar, 2001.  
CDROM 625.8222 UNDERST 2001

## **ELECTRONIC BOOKS & REPORTS**

### **Geotechnical Engineering, Engineering Geology**

**Calibration and Accuracy Assessment of the TDR One-Step Method for Quality Control of Compacted Soils.** Florida Dept. of Transportation, 2006.  
[http://www.dot.state.fl.us/research-center/Completed\\_Proj/Summary\\_SMO/FDOT\\_BD544\\_19\\_rpt.pdf](http://www.dot.state.fl.us/research-center/Completed_Proj/Summary_SMO/FDOT_BD544_19_rpt.pdf)

**Shored Mechanically Stabilized Earth (SMSE) Wall Systems Design Guidelines.** Federal Highway Administration, Central Federal Lands Highway Division, 2006. FHWA-CFL/TD-06-001.

[http://www.cflhd.gov/techDevelopment/completed\\_projects/geotech/smse/](http://www.cflhd.gov/techDevelopment/completed_projects/geotech/smse/)

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**Asphalt Emulsion Technology.** Transportation Research Board, 2006.  
Transportation Research Circular E-C102.

<http://onlinepubs.trb.org/onlinepubs/circulars/ec102.pdf>

**Concrete: The Sustainable Infrastructure Material for the 21st Century.** Transportation Research Board, 2006. Transportation Research Circular E-C103.

<http://onlinepubs.trb.org/onlinepubs/circulars/ec103.pdf>

**Detection of Microcracks in Concrete Cured at Elevated Temperatures.** Florida Dept. of Transportation, 2006.

[http://www.dot.state.fl.us/research-center/Completed\\_Proj/Summary\\_SMO/FDOT\\_BD545\\_50\\_rpt.pdf](http://www.dot.state.fl.us/research-center/Completed_Proj/Summary_SMO/FDOT_BD545_50_rpt.pdf)

**Evaluation and Validation of a High-Speed Multi-Function System for Automated Pavement Condition Survey.** Florida Dept. of Transportation, 2006.

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**Evaluation of Concrete Deck and Crack Sealers.** Wisconsin Dept. of Transportation, 2005.

<http://www.dot.wisconsin.gov/library/research/docs/finalreports/03-09concretesealers-f.pdf>

**Evaluation of the Performance, Cost-Effectiveness, and Timing of Various Preventive Maintenances: Interim Report.** Colorado Dept. of Transportation, 2006.

<http://www.dot.state.co.us/Publications/PDFFiles/preventivemaint.pdf>

**Field Trial of Gravel Stabilization Methods - Route 1, Cyr /Van Buren: Final Report.** Maine Dept. of Transportation, 2006.

<http://www.state.me.us/mdot/transportation-research/pdf/report9234final.pdf>

**Highway Concrete Technology Development and Testing Volume III: Field Evaluation of SHRP C-205 Test Sites (High-Performance Concrete).** Federal Highway Administration, 2006. FHWA-RD-02-084.

<http://www.fhwa.dot.gov/pavement/pccp/pubs/02084/02084.pdf>

**Implementation of Proven PCCP Practices in Colorado.** Colorado Dept. of Transportation, 2006.

<http://www.dot.state.co.us/Publications/PDFFiles/pccpimplementation.pdf>

**Investigation of the Low-Temperature Fracture Properties of Three MnROAD Asphalt Mixtures.** Minnesota Dept. of Transportation, 2006.

<http://www.lrrb.org/more.cfm?code=2035>

**Longitudinal Joint Treatment: Final Report.** Maine Dept. of Transportation, 2006.

<http://www.state.me.us/mdot/transportation-research/pdf/report0018final.pdf>

**New Technologies for Evaluating Flexible Pavement Construction: Year 1 Report.** Texas Transportation Institute, 2006.

<http://tti.tamu.edu/documents/0-4774-1.pdf>

**Optimization of Traffic Data Collection for Specific Pavement Design.** Federal Highway Administration, 2006. FHWA-HRT-05-079.

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**Precast Concrete Paving Panels: The CDOT Region 4 Experience.** Colorado Dept. of Transportation, 2006.

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**Synthesis of Current Practice on the Design, Construction, and Maintenance of Porous Friction Courses.** Texas Transportation Institute, 2006.

<http://tti.tamu.edu/documents/0-5262-1.pdf>

**Tire/Road Noise--Assessment of the Existing and Proposed Tire Noise Limits.** TRL Limited, 2006.

[http://www.dft.gov.uk/stellent/groups/dft\\_roads/documents/page/dft\\_roads\\_612326.pdf](http://www.dft.gov.uk/stellent/groups/dft_roads/documents/page/dft_roads_612326.pdf)

**The Use of Micro-Surfacing for Pavement Preservation - 2nd, 3rd, & 4th Year Interim Report.** Maine Dept. of Transportation, 2005.

<http://www.state.me.us/mdot/transportation-research/pdf/report0203i2-4.pdf>

## **Materials, Testing, Inspection**

**GPS/GIS Inspection and Analysis Tools for Highway Construction.** Florida Dept. of Transportation, 2006.

[http://www.dot.state.fl.us/research-center/Completed\\_Proj/Summary\\_CN/FDOT\\_BD543\\_08\\_rpt.pdf](http://www.dot.state.fl.us/research-center/Completed_Proj/Summary_CN/FDOT_BD543_08_rpt.pdf)

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